



Memorandum

To: Erin Zwirko, Town of Arlington
From: Alexis Smith, Metropolitan Area Planning Council
Date: March 11, 2019
Re: Potential Buildout Resulting from Zoning Bylaw Amendments

Introduction

The Arlington Redevelopment Board is currently considering eight articles that would amend the Arlington Zoning Bylaw. Articles 6 through 14 target existing challenges in the Zoning Bylaw that limit economically-feasible infill development along the Town's major transportation corridors in the higher-density residential districts (R4 through R7) and the Business Districts. The articles are as follows:

1. Density and dimensional adjustments (Articles 6 and 7) to make these requirements consistent with existing development and at a scale appropriate for major roadways;
2. Open space adjustments (Article 8) to eliminate the requirement for usable open space and increase the requirement for landscaped open space, as well as offering flexibility in what is considered open space;
3. Adjust the definition of townhouse structures (Article 9) to better distribute individual townhouses within a single structure;
4. Require the upper-story building step back (Article 10) at the fourth story consistent with increases in the maximum height allowed;
5. Reduce the height buffer distances (Article 11) to retain reasonable relief for adjacent low-density districts without effectively lowering the maximum height allowed;
6. Adjust how street yards are calculated on corner lots (Article 12); and
7. Reduce the number of parking spaces per unit for multi-family uses to one space per unit (Article 13) and allow the R7 District to be considered for transportation demand management (Article 14).

In preparation for the 2019 Annual Town Meeting, a buildout analysis of the higher-density residential districts and the business districts was completed to determine development potential under current zoning and under the proposed amendments to the Zoning Bylaw. This memo summarizes the findings from the buildout analysis. The methodology is attached as an appendix.

Analysis

For both existing and proposed zoning, the numbers below represent a full buildout from scratch. In other words, the analysis identifies the number of units that could be built if there were no existing

buildings and every site was rebuilt to full capacity. Of course, what will be built in reality, under either existing or proposed zoning, would only be a fraction of these numbers. Based on the current Assessor's data, there are 4,599 residential units in the R4 through R7 districts and the Business districts.

Under current zoning, MAPC estimates that just under 6,986 units could be built within the subject districts (see Table 1) if no buildings existed today. Based on Arlington's current inclusionary zoning policy, over 1,000 of these units would be affordable. Since there are currently 4,599 residential units within the subject districts, the existing bylaw is approximately 66% efficient in creating housing units.

It is important to note that development capacity does not equate to what is built in reality. As discussed above, these numbers assume that every parcel in the districts will be rebuilt from the ground up; in reality, development will happen incrementally over time. Additionally, these numbers do not reflect demand. MAPC projects that Arlington will see demand for 21,976 housing units in 2030. This is an increase of 2,000 units over Arlington's current 19,974 of housing units (2010 US Census). These numbers indicate that there would not be demand for a full buildout. However, it is interesting to note that the difference between the total allowable units today and the current number of residential units in the subject districts is approximately equal to the projected demand at 2,387. The fact that the Zoning Bylaw is approximately 66% efficient in creating housing units in the subject districts indicates that there is room to grow while meeting the project demand for housing within Arlington.

Turning to the projected number of units that could be built under the proposed zoning, MAPC estimates that 9,948 units could be built in the same districts (see Table 2) if no buildings existed today. When accounting for the existing residential units, the proposed zoning results in a total of 5,349 units. The proposed amendments would make the existing Zoning Bylaw even more efficient at approximately 86%. The number of units that are actually built in Arlington in the next decade will more likely mirror the projected demand rather than the full buildout numbers described; the proposed zoning changes would simply create the opportunity to more easily meet this demand.

The capacity for commercial space in the business districts is not expected to change under proposed zoning. MAPC assumed that the ground floor of buildings in commercial districts would be devoted to commercial use under both existing and proposed zoning; this number remained unchanged regardless of the number of units that were constructed in the upper stories.

Table 1: Projected buildout under existing zoning.

| District | Total District Acreage | Total Allowed Units | Total Allowed Affordable Units | Total Allowed Commercial SqFt |
|--------------|------------------------|---------------------|--------------------------------|-------------------------------|
| R4 | 19.4 | 233 | 35 | 0 |
| R5 | 63.7 | 1274 | 191 | 0 |
| R6 | 49 | 1225 | 184 | 0 |
| R7 | 18.7 | 486 | 73 | 0 |
| B1 | 25.9 | 596 | 89 | 129500 |
| B2 | 16.9 | 490 | 74 | 84500 |
| B2A | 22.2 | 355 | 53 | 166500 |
| B3 | 30.2 | 997 | 149 | 226500 |
| B4 | 30 | 990 | 149 | 225000 |
| B5 | 10.3 | 340 | 51 | 77250 |
| Total | 286 | 6986 | 1048 | 909250 |

Table 2: Projected buildout under proposed zoning.

| District | Total District Acreage | Total Projected Units | Total Projected Affordable Units | Total Projected Commercial SqFt |
|--------------|------------------------|-----------------------|----------------------------------|---------------------------------|
| R4 | 19.4 | 252 | 38 | 0 |
| R5 | 63.7 | 1911 | 287 | 0 |
| R6 | 49 | 1911 | 287 | 0 |
| R7 | 18.7 | 729 | 109 | 0 |
| B1 | 25.9 | 777 | 117 | 129500 |
| B2 | 16.9 | 592 | 89 | 84500 |
| B2A | 22.2 | 533 | 80 | 166500 |
| B3 | 30.2 | 1389 | 208 | 226500 |
| B4 | 30 | 1380 | 207 | 225000 |
| B5 | 10.3 | 474 | 71 | 77250 |
| Total | 286 | 9948 | 1492 | 909250 |

Appendix 1: Methodology

This analysis is based on test buildouts previously developed by MAPC as part of this project. These test buildouts are site-specific models of what could be built under current and proposed zoning. An example of one of these test buildouts is attached for illustration purposes. Note that a parcel's inclusion in this study does not necessarily indicate that it is being considered for redevelopment; sites were selected solely with the intention of capturing a variety of site conditions.

For each of the higher-density residential districts and business districts where a zoning change is proposed, MAPC used the test buildout cases to estimate the potential number of housing units per acre and commercial square footage per acre under existing zoning, and the changes that would occur if the zoning amendments are adopted. This was done on a district-wide basis. For districts in which a test buildout site was not analyzed, MAPC estimated a number of units by making adjustments to test buildouts for a similar district. For example, for existing zoning in the R6 district, the R7 test buildout was adjusted to reflect the R6 district's lower height limit.

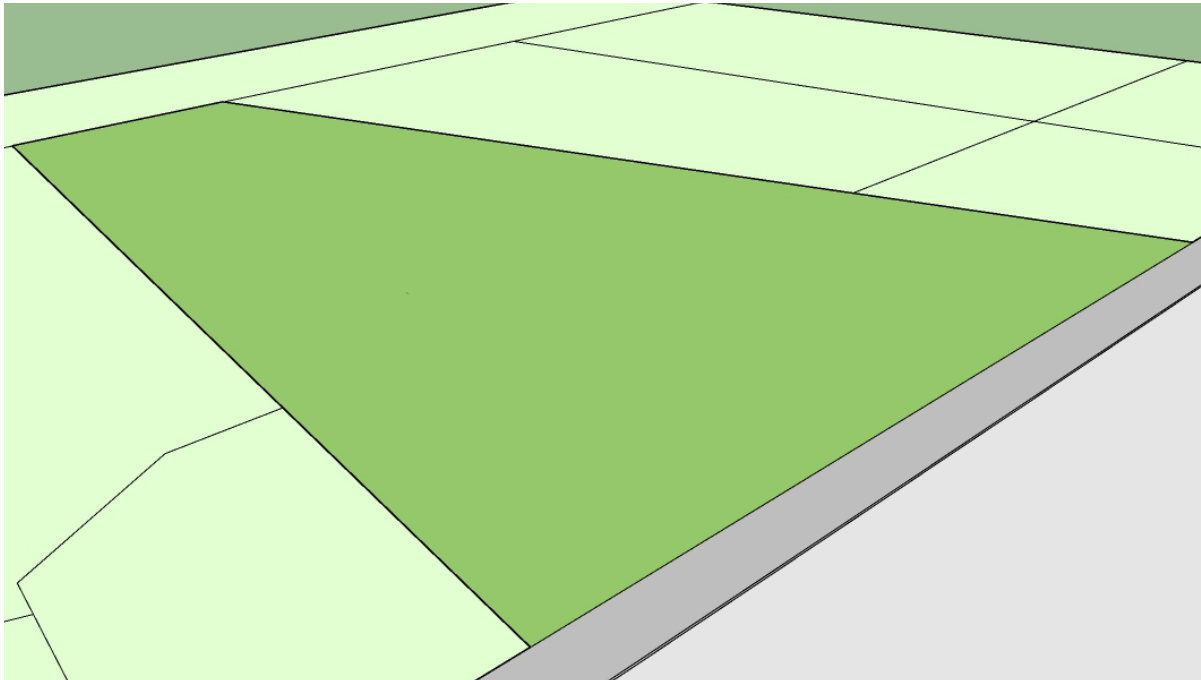
These numbers were then adjusted to account for two conditions not reflected in the original site test buildouts. First, the test site buildouts assumed a generic unit size based on inner-core Boston averages, while in reality units in Arlington are slightly larger. The potential number of units per acre was adjusted accordingly to better reflect this local development trend. Secondly, the site test buildout numbers were adjusted to account for the special permit review process. Under both current and proposed zoning, no multi-family or mixed-use is permitted in Arlington by right. In addition to special permit review by the Arlington Redevelopment Board, many parcels are subject to additional review by the Conservation Commission, the Historic Districts Commission, and/or the Historical Commission. The site test buildouts assumed the maximum level of development possible within each district's dimensional requirements, but did not account for project-specific requirements that the various boards might impose on a project – for example, additional open space or pervious surfaces, or additional building setbacks or reduced height. Accordingly, the final estimates of units per acre are adjusted to reflect reductions in site capacity due to the various board reviews.

Based on these examples, MAPC developed a rough figure for units per acre in each district under current and proposed zoning, and arrived at a total number of potential units and commercial square footage under each scenario for each district based on the total district acreage, using the acreages provided in the zoning audit conducted by RKG and included as Appendix I in Arlington's Master Plan.

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



324 MASS AVE - MIXED USE SCENARIO

Zoned B2A - Major Business

Existing use: 15,000 sq.ft. commercial

1.5 acres - meets 20,000 sq.ft. minimum lot area

276' lot frontage - meets 50' minimum

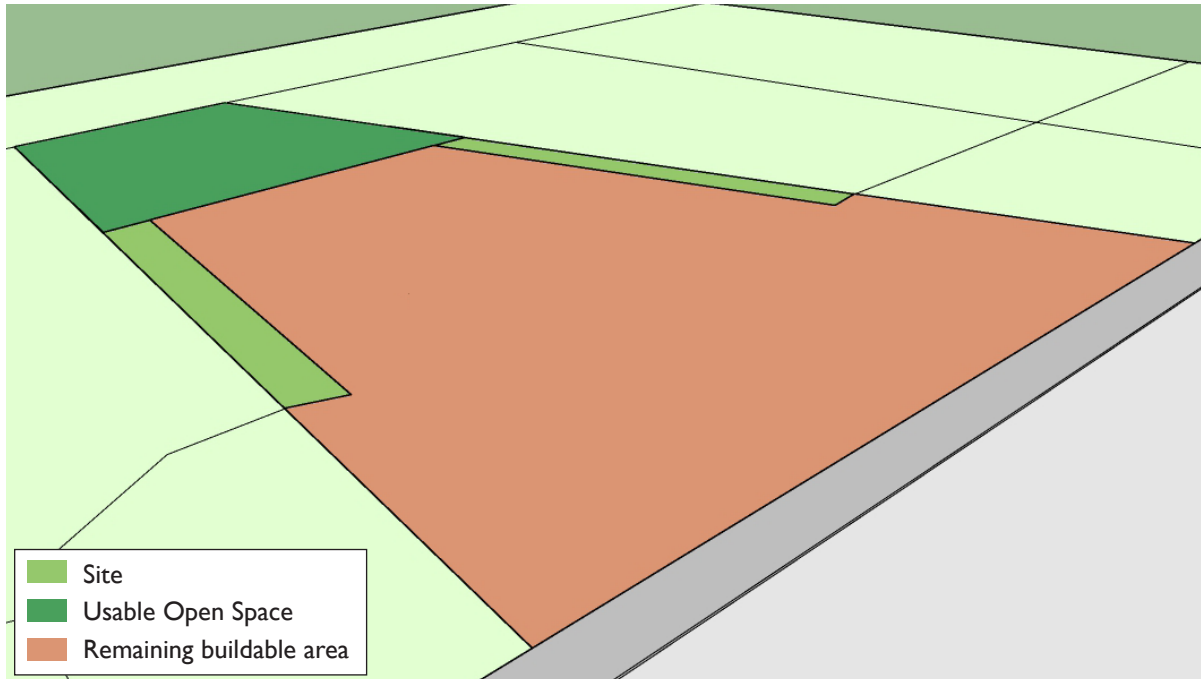
Density - 700 sq.ft. lot area per unit - max. 92 units



TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



REQUIRED YARDS AND OPEN SPACE - MIXED USE

Front yard - None

Side yard - None adjacent to B districts; 15' adjacent to R districts

Rear yard - 17' (10+length of wall parallel to lot line/10)

Useable Open Space - 12,920 sq.ft (20% gross floor area assuming FAR of 1.0)

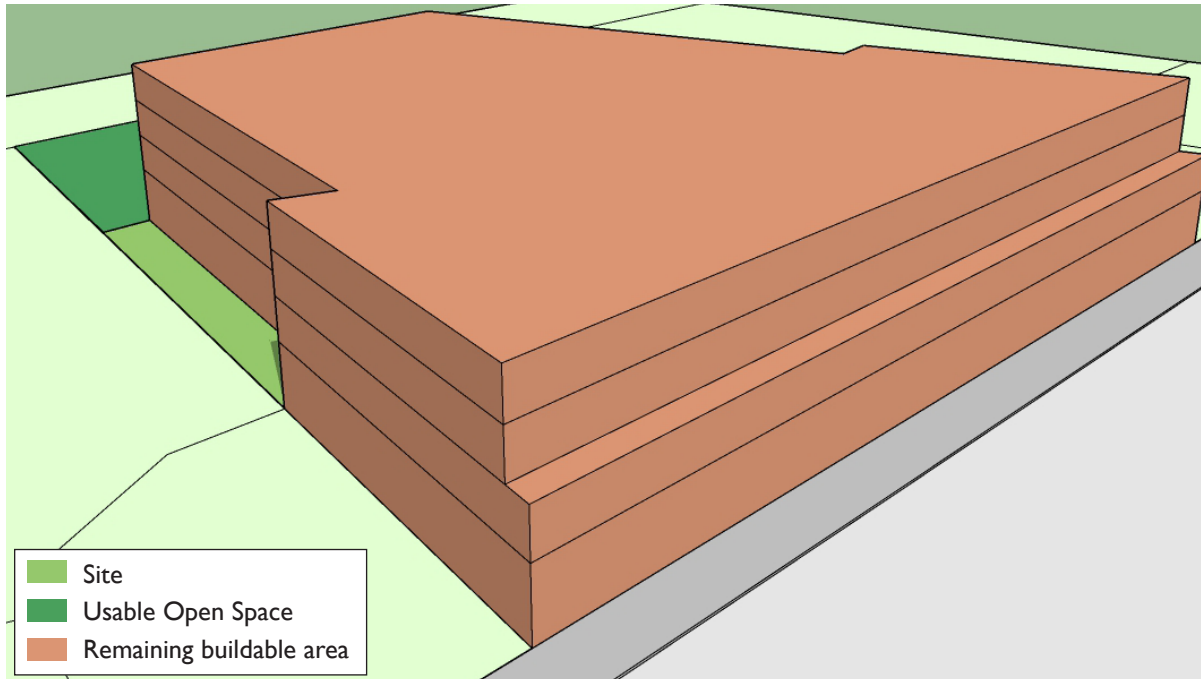
Minimum dimensions 25'x25'

Landscaped Open Space (not shown) - 6,460 sq.ft. (10% gross floor area)

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



MAXIMUM HEIGHT - MIXED USE

Maximum height 50' / 4 stories

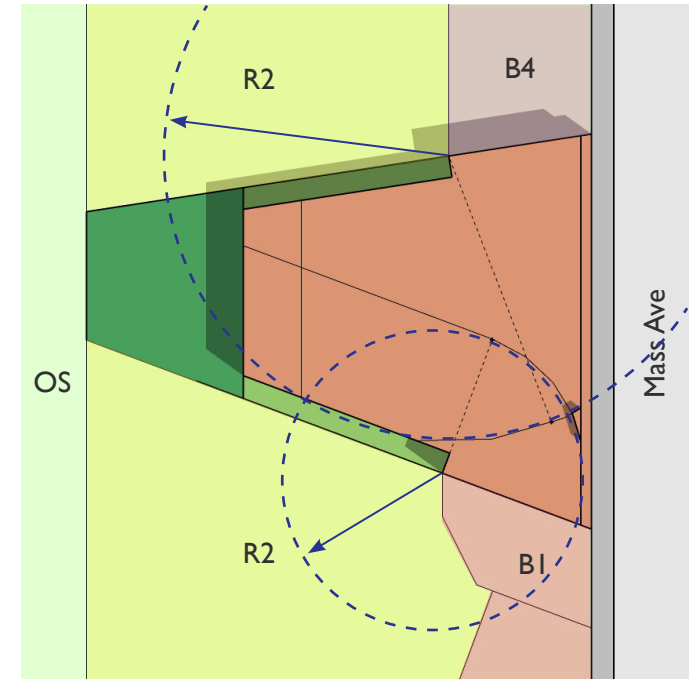
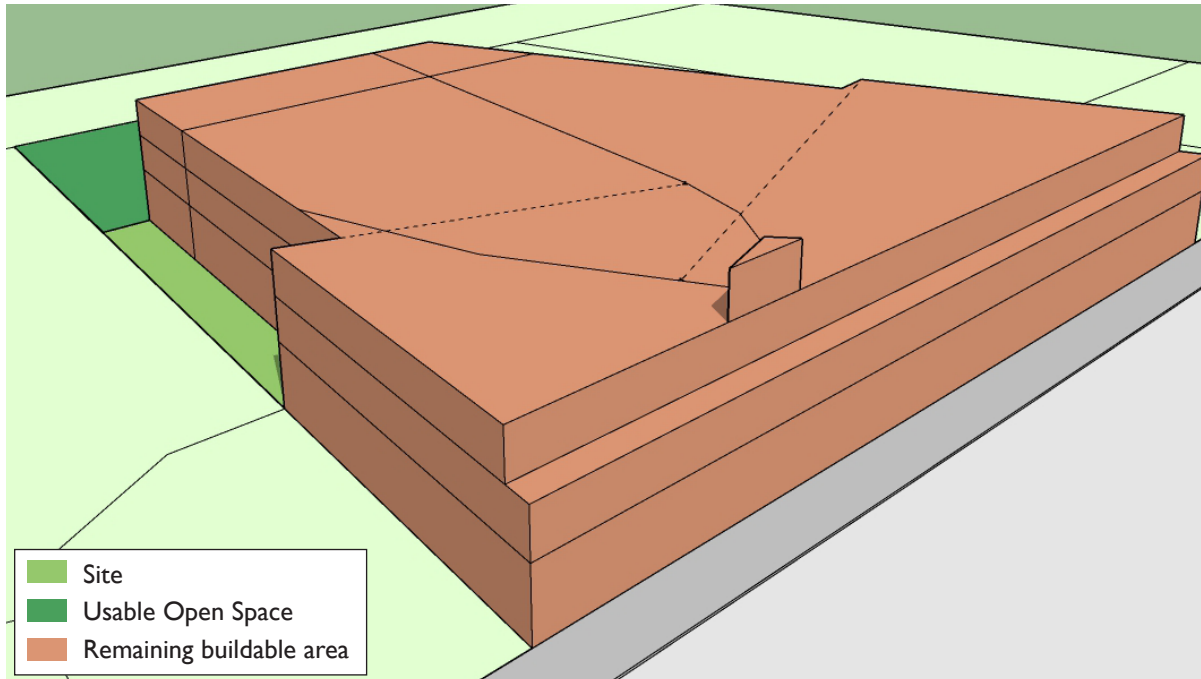
15' tall ground story with 10' upper stories

7.5' setback from street at third story and above for any building over 3 stories

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



HEIGHT BUFFER - MIXED USE

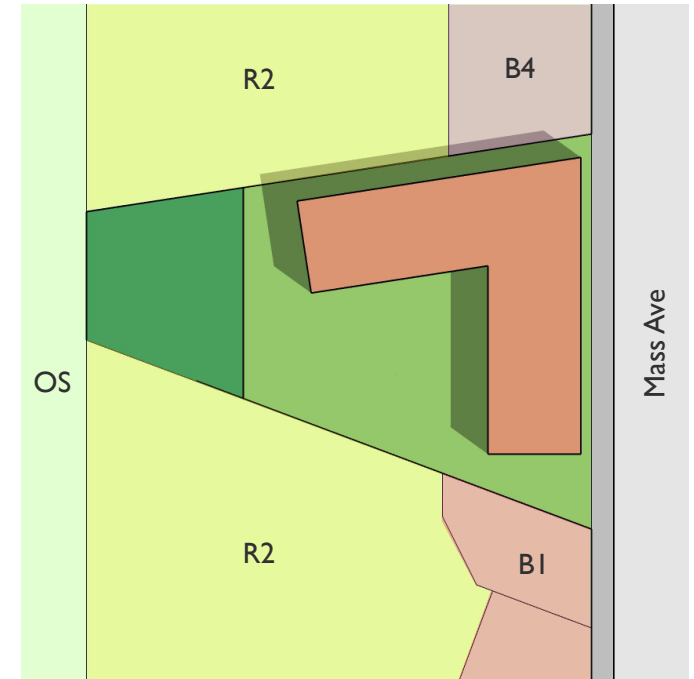
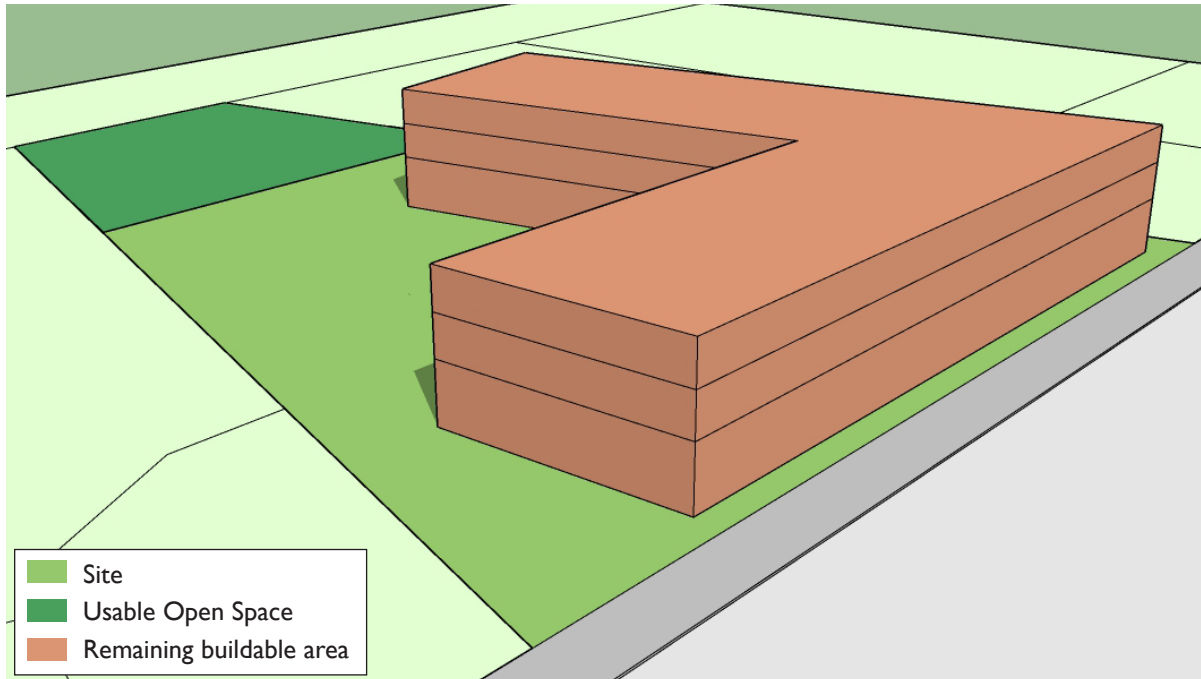
Maximum height 40' / 3 stories within height buffer

Height buffer applies within 200' of residential zone to the north, 100' of residential zone to the south, and 150' of open space zone to the west

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



FLOOR AREA RATIO - MIXED USE

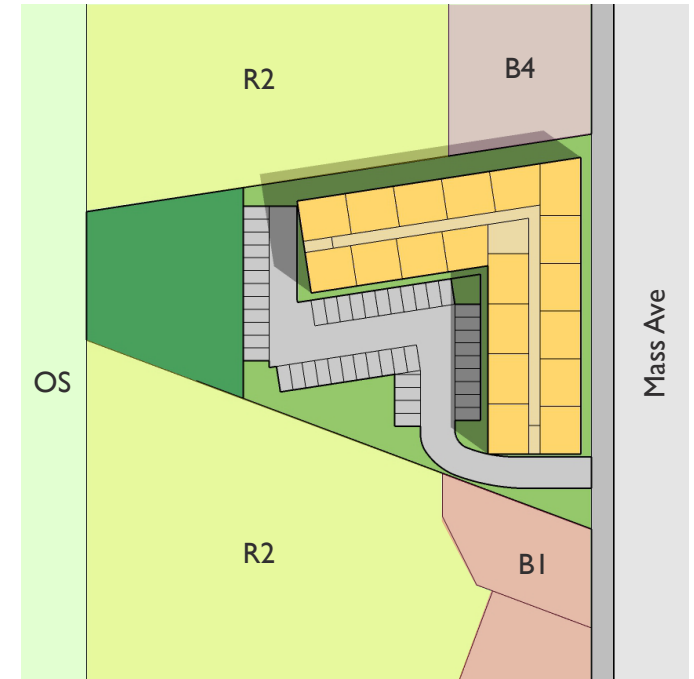
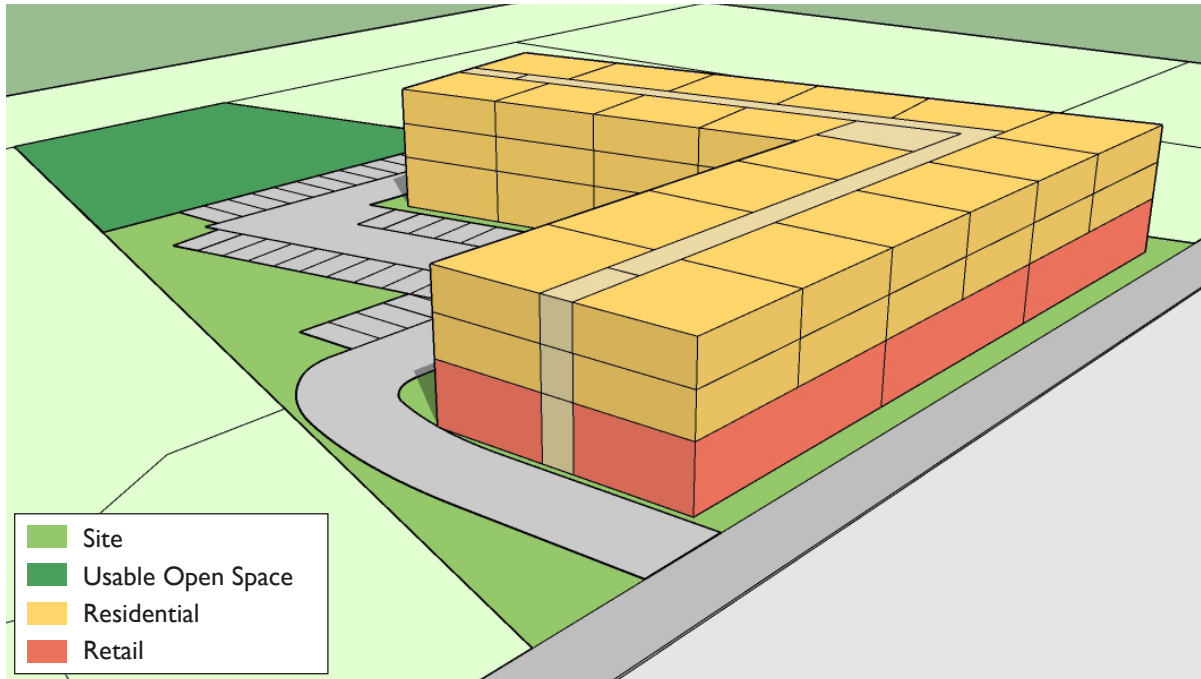
Floor Area Ratio = Total building floor area / total lot area

Maximum FAR 1.0

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



PARKING - MIXED USE

Parking required for 44 apartments: 61 spaces

Parking required for 15,000 sq.ft. retail: 40 spaces

Total: 101 spaces

Total with Transportation Demand Management and affordable housing reduction: 71 spaces

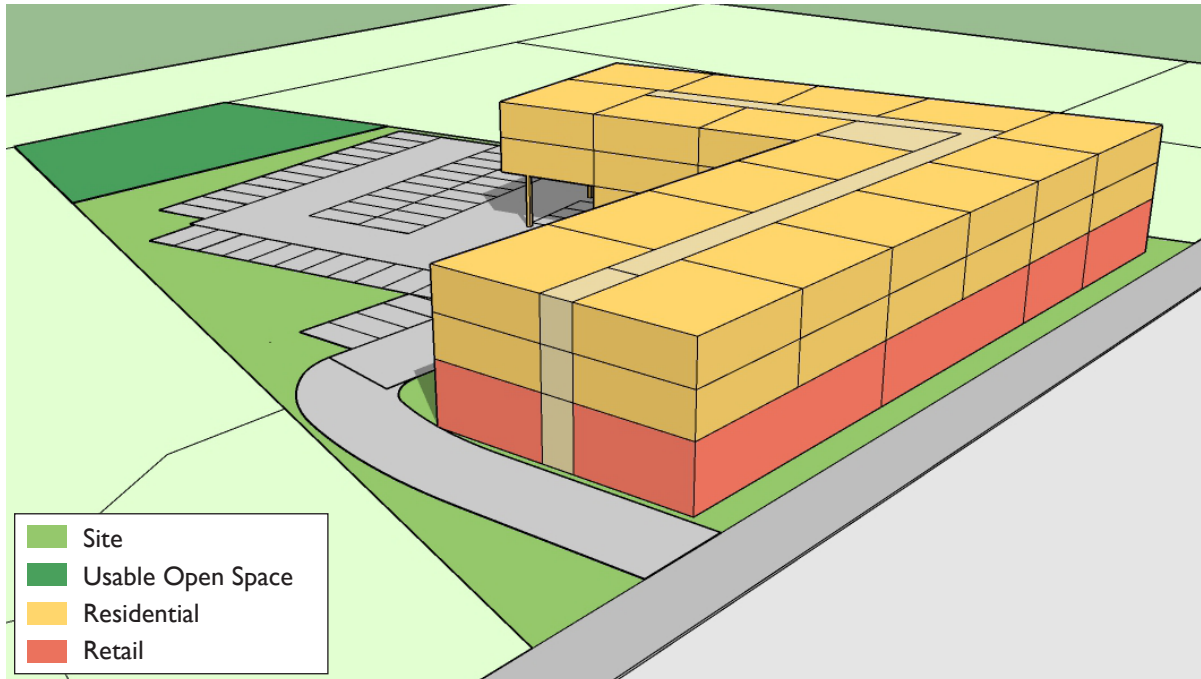
But only room for ~47 spaces on site with this building footprint

Assumes 50% one-bedroom units (req. 1.15 parking spaces/unit), 40% two-bedroom units (req. 1.5 spaces/unit), and 10% three-bedroom units (req. 2 spaces/unit). Parking requirement for retail is 1 space per 300 sq.ft. floor area; in mixed use development the first 3,000 sq.ft. of floor area is exempt from parking requirements.

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - MIXED USE SCENARIO



FINAL BUILDOUT - MIXED USE

36 apartments
15,000 sq.ft. retail
64 parking spaces

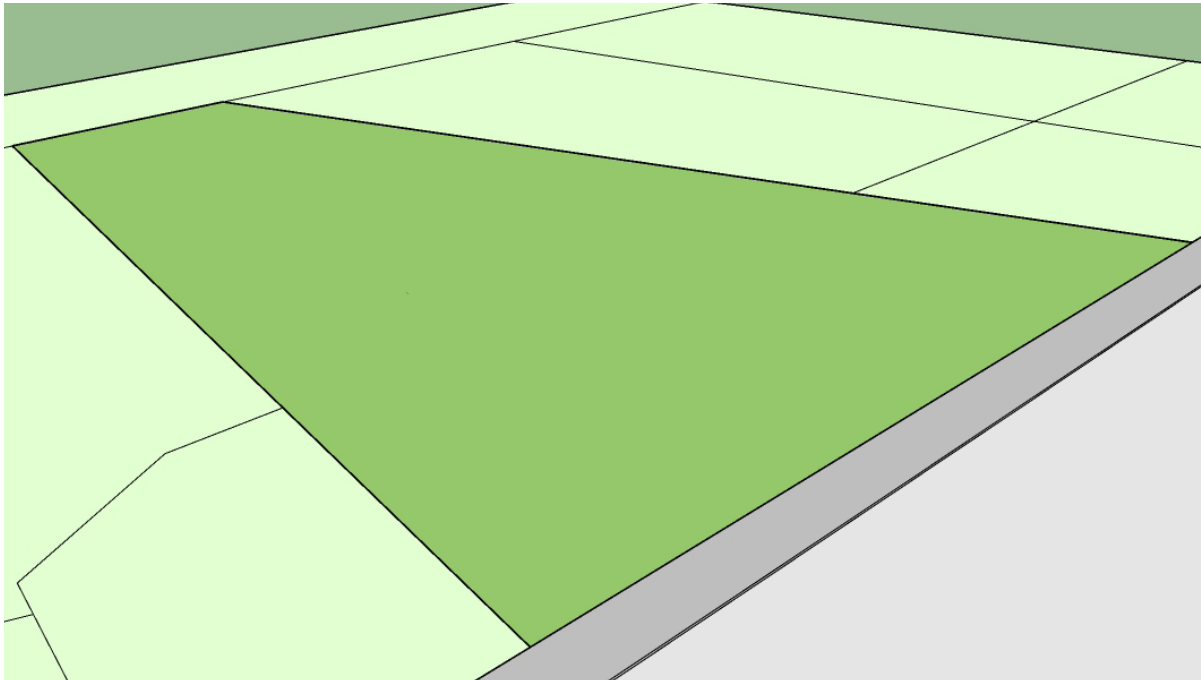
MOST CONSTRAINING FACTOR: Parking

OTHER MAJOR CONSTRAINTS: Height buffer, FAR, usable open space

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



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Zoned B2A - Major Business

Existing use: 15,000 sq.ft. commercial

1.5 acres - meets 20,000 sq.ft. minimum lot area

276' lot frontage - meets 100' minimum

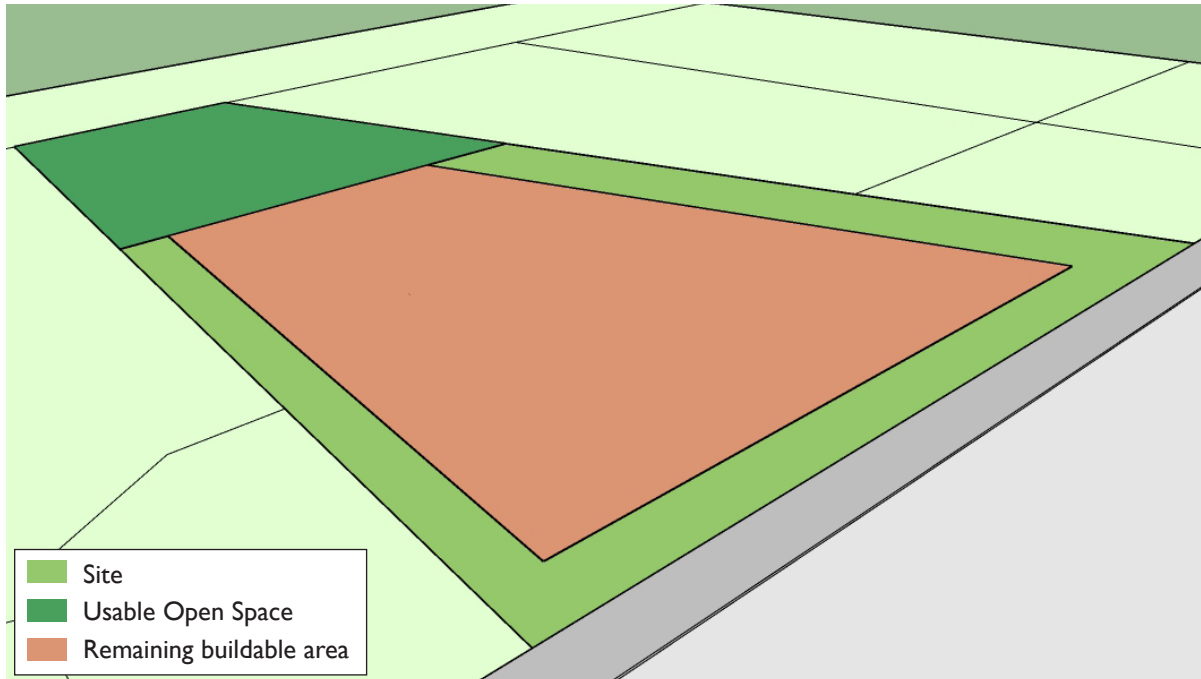
Density - 700 sq.ft. lot area per unit - max. 92 units



TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



REQUIRED YARDS AND OPEN SPACE - RESIDENTIAL

Front yard - 17'-6" ($15 + \text{building height} / 10$, assumes 25' building height)

Side yard - 15' and 37'-6" ($(\text{building height} + \text{building length}) / 6$)

Rear yard - 30' ($(\text{building height} + \text{building length}) / 6$, minimum 30')

Useable Open Space - 15,500 sq.ft (20% gross floor area assuming FAR of 1.2)

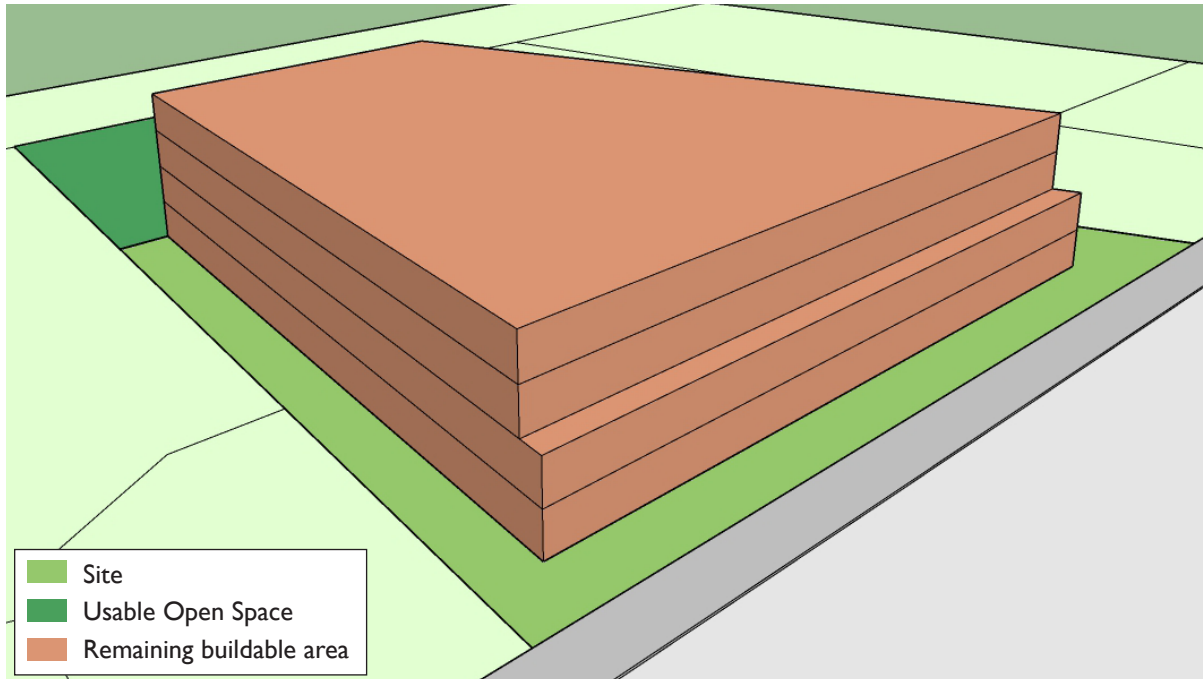
Minimum dimensions 25'x25'

Landscaped Open Space (not shown) - 7,750 sq.ft. (10% gross floor area)

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



MAXIMUM HEIGHT - RESIDENTIAL

Maximum height 40' / 4 stories

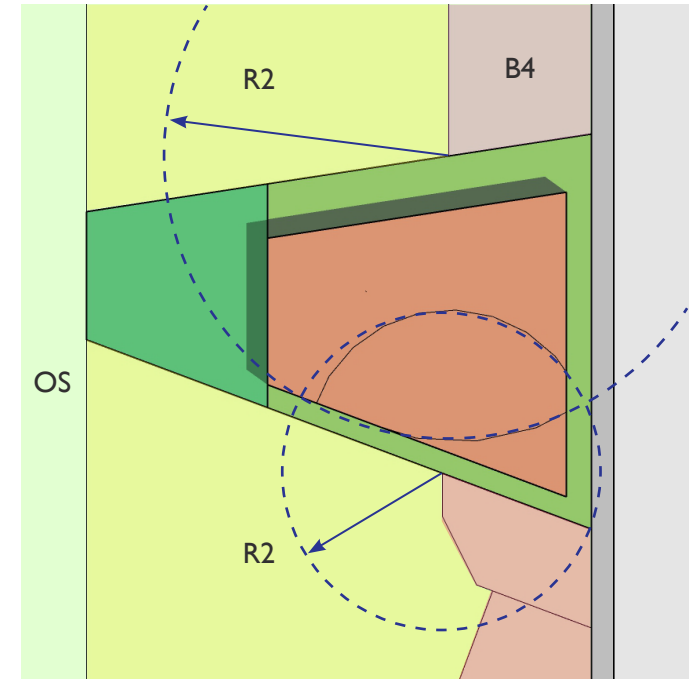
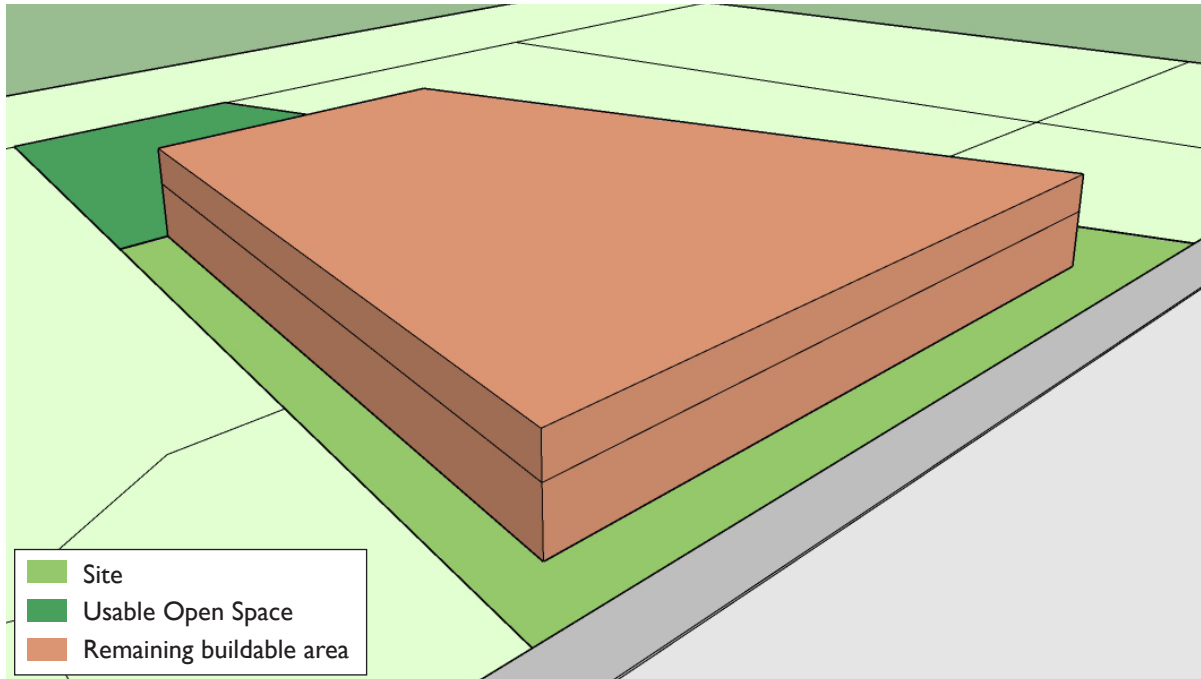
All levels 10' tall

7.5' setback from street at third story and above for any building over 3 stories

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



HEIGHT BUFFER - RESIDENTIAL

Maximum height 25' within height buffer

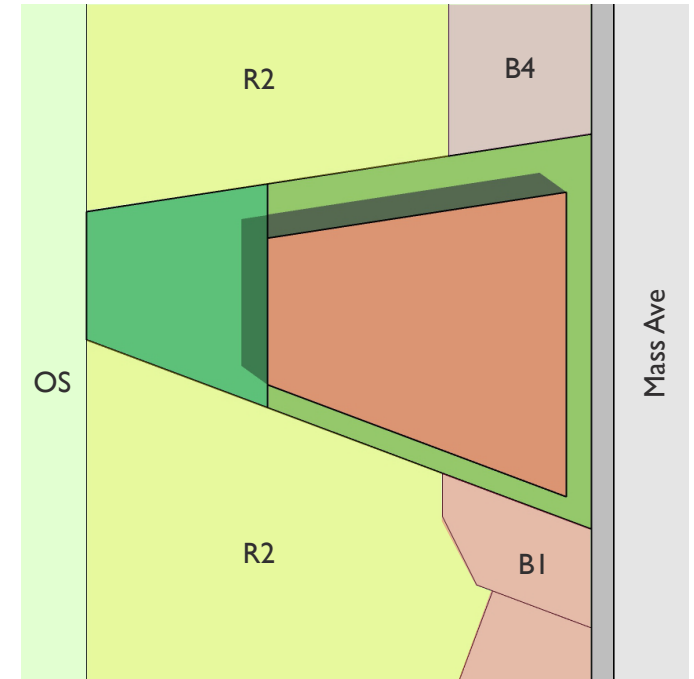
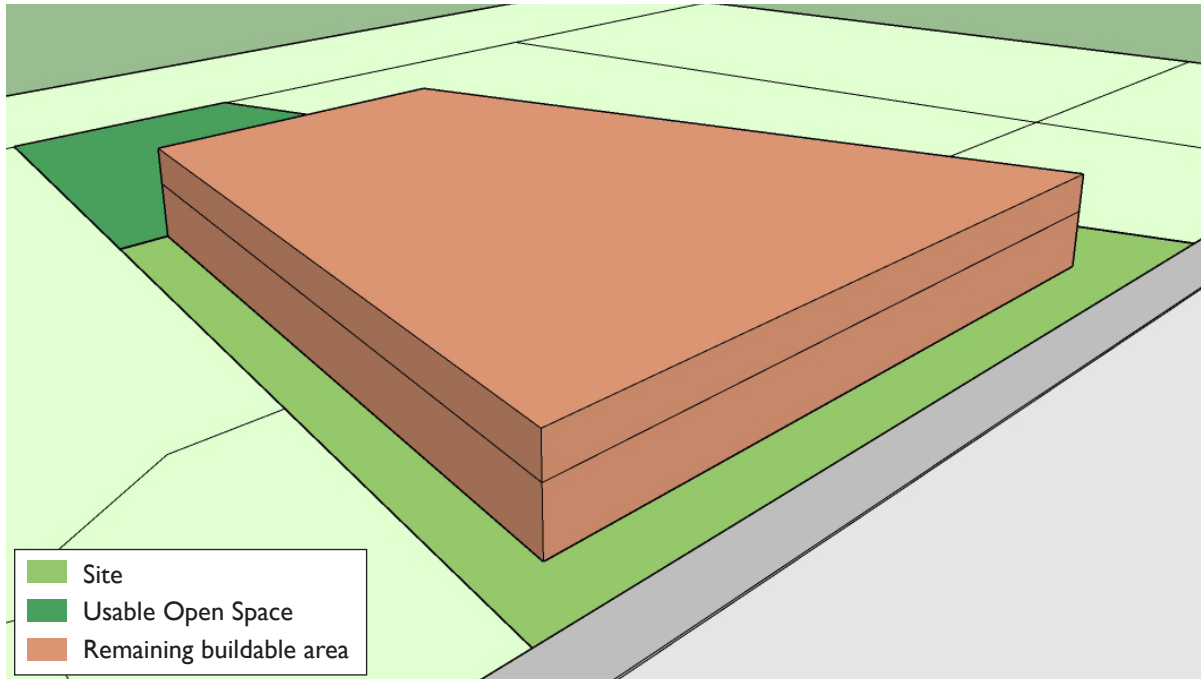
15' tall ground story with 10' second story

Height buffer applies to entire buildable area - within 200' of residential zone to the north,
100' of residential zone to the south, and 150' of open space zone to the west

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



FLOOR AREA RATIO - RESIDENTIAL

Floor Area Ratio = Total building floor area / total lot area

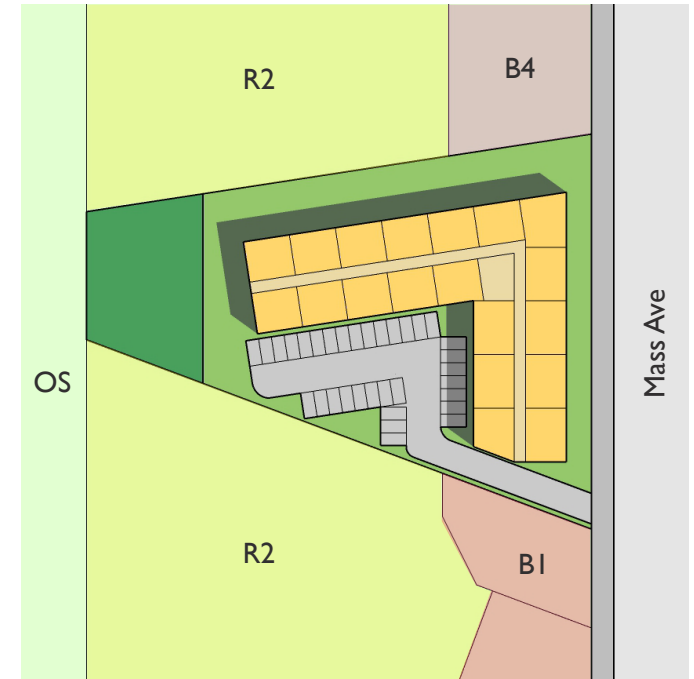
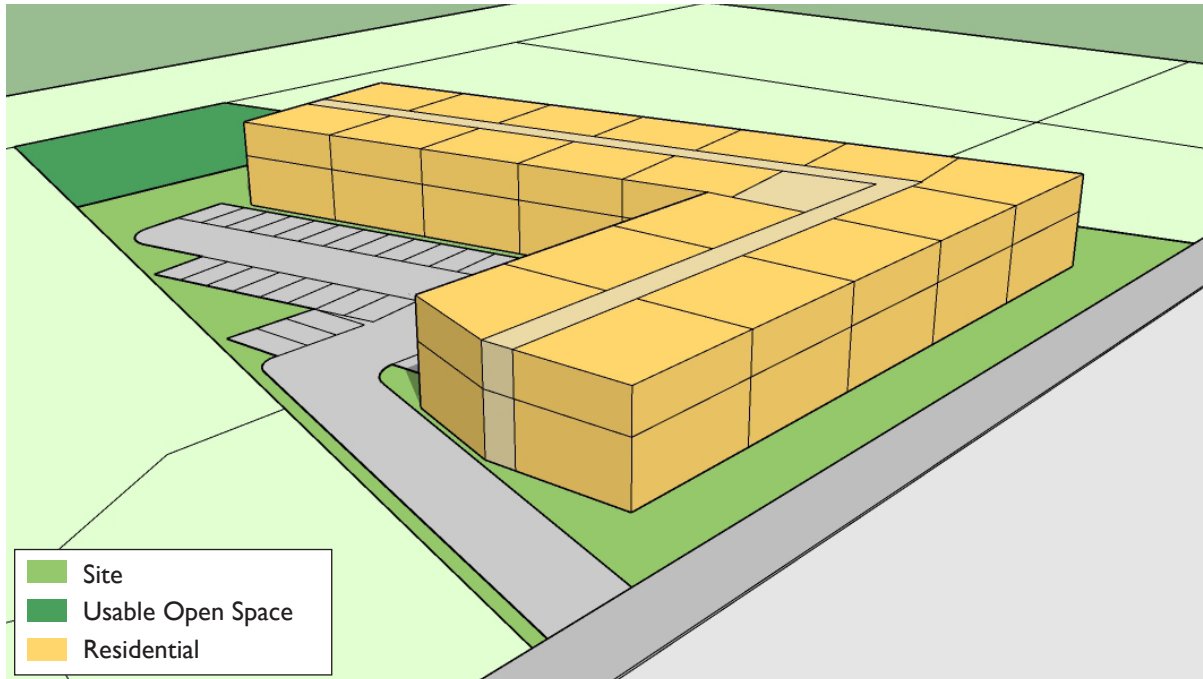
Maximum FAR 1.2

Yards and height limit buildable envelope to FAR 1.0

TOWN OF ARLINGTON

MULTIFAMILY ZONING BUILDOUT ANALYSIS

324 MASS AVE - RESIDENTIAL SCENARIO



FINAL BUILDOUT - RESIDENTIAL

38 apartments

25 parking spaces (includes Transportation Demand Management and affordable housing reduction)

MOST CONSTRAINING FACTORS: Height limit and height buffer